

COMPUTER SCIENCE STUDY GROUP, RA 07-43; Due: August 10, 2007, no later than 4:00PM ET. TECHNICAL POC: Dr. Benjamin Mann, Program Manager, DARPA/DSO; Ph: (571) 218-4246; Email: RA07-43@darpa.mil; URL: www.darpa.mil/dso/solicitations/solicit.htm; Website Submission: <http://www.sainc.com/dsobaa/>

DESCRIPTION

This Research Announcement (RA) initiates Phase 1 of the 2008 Computer Science Study Group (CSSG). A summary of the CSSG program is outlined below. Full details of the CSSG program are provided in the "Proposer Information Pamphlet" (PIP) posted on each of the submission websites listed below. Proposers applying for the 2008 CSSG may submit their proposals to the grants.gov website (<http://www.grants.gov/>) by using the "Apply for Grants" function or by going directly to the DARPA/DSO Submission website (<http://www.sainc.com/dsobaa/>) and choosing "submit a full proposal" under RA "07-43, 2008 CSSG."

RA 07-43, 2008 CSSG proposals are due no later than 4:00PM, ET, August 10, 2007.

BACKGROUND

The Defense Advanced Research Projects Agency (DARPA) is soliciting proposals from U.S. institutions of higher learning nominating junior faculty to participate in the CSSG. The CSSG will focus on computer science technology and its application to associated problems of interest to, and in support of, Department of Defense (DoD) objectives. The CSSG consists of two principal functional areas:

- 1) Participation in the 2008 Computer Science Study Panel (CS Study Panel); and
- 2) Possible participation in future Computer Science Research Projects (CS Research Projects).

PROGRAM OBJECTIVES/DESCRIPTION

The objective of the CSSG is to rapidly identify ideas in the field of computer science that will provide revolutionary advances, rather than incremental benefit, to DoD.

Phase 1

Phase 1 (12 months) consists of participation on the CS Study Panel. The CS Study Panel anticipates meeting at least four times throughout the 2008 calendar year, totaling approximately twenty days. Two of the meetings will occur during the academic year and will take place in the Washington, D.C. metropolitan area. Two extended meetings, lasting approximately one week each, will take place during the summer, and will involve travel throughout the United States. The Institute for Defense Analyses (IDA) will have administrative responsibility for the CS Study Panel, which includes organizing and leading the meetings. These meetings, which consist of trips to Government and industry sites, may require a SECRET security clearance. In addition, participation in this program may expose participants to proprietary and other non-public data and, as a result, participants will be required to sign Non-Disclosure Agreements (NDA)/Conflict of Interest (COI) forms or other related forms as required by DARPA. In performing its administrative functions under the program, IDA will hold all participants' clearances

and NDAs/COIs. Due to this, all participants on the panel must be U.S. citizens and must either already have a minimum of a SECRET security clearance or apply for and receive a U.S. Department of Defense SECRET security clearance through IDA. Participants may be required to apply for and receive a TOP SECRET clearance, at DARPA's discretion. For successful proposers, host institutions will receive grants or other assistance instruments for up to \$100,000. The funding to the host institution will support participant travel expenses for Panel meetings; it will also support participant salary, to include time spent while participating in the CS Study Panel and time to connect the participants' computer science research to critical DoD needs identified during their Panel trips. The funding may also support research assistants' summer salary and costs for administrative support.

Phase 2

Phase 2 (12 to 24 months) consists of continuation of Phase 1 CS Study Panel participation, as well as work on a CS Research Project. Before the end of Phase 1, each participant will be eligible to submit a proposal for a CS Research Project, for which they would become the Principal Investigator (PI) for the proposed research. A participant is not required to submit a proposal for Phase 2; however, any participant who does not submit a proposal will not be eligible for future funding under this program. The research should present novel ideas in computer science and its application that will lead to fundamental advances in the field rather than incremental change. Details of the requirements for the research proposal will be provided to the CS Study Panel in the course of the first year of program participation. Each selected Phase 2 CS Research Project will be funded, in an amount not to exceed \$500,000, for a period of 12 to 24 months. The funding is estimated to occur in the spring of 2009. Research activities will take place at the host institution, and will be confined to unclassified, fundamental research that supports the objectives of the program. Participants who submit a proposal for Phase 2 and are not selected for award will not be eligible to submit proposals for funding in Phase 3 of the program.

Phase 3

Phase 3 (12 months) consists of a CS Research Project only. Participants are required to obtain matching funds in addition to requesting funding from DARPA, total amount not to exceed \$500,000 (up to \$250,000 in DARPA funding and up to an additional \$250,000 in matched funds). It is expected that PIs will be eligible to submit proposals for the Phase 3 research project sometime in late 2009 or 2010, depending on the duration of their Phase 2 research. The designated funds to be matched may come from any Government or industrial source, but must support the ongoing research project in a manner consistent with the fundamental computer and information technology developed in the Phase 2 CS Research Project. Details of the requirements for the research proposal will be provided during the second year of program participation. Participants who submit a proposal for Phase 3 and are not selected for award will not be eligible for future funding, if available, under this program.

TECHNOLOGIES OF INTEREST

The goal of the 2008 CSSG program will be to identify and develop innovative ideas with high payoff in computer science and related disciplines. Examples of potential areas of interest are given in Section D of the PIP. Research will focus on ideas that can lead to revolutionary technology to permit significant advances in computational modeling, simulation, control, information analysis and DoD functional capabilities. Technologies should be derived from the broad area of computer science, although respondents do not necessarily need to be members of traditional computer science departments.

TECHNICAL AND ADMINISTRATIVE INQUIRIES

The 2008 CSSG PIP and this solicitation document are available online at <http://www.darpa.mil/dso/solicitations/solicit.htm>. Administrative or technical questions should be sent via e-mail to RA07-43@darpa.mil. Questions for the DARPA Grants Officer, including budget questions, should also be directed to RA07-43@darpa.mil. Note that the process of negotiating the initial grant or other assistance instrument begins after a proposer is notified of his or her selection as a participant on the CS Study Panel and has obtained a SECRET clearance. Questions regarding the clearance process should be e-mailed to CS2P.ClearanceQuestions@ida.org. All questions and answers of relevance to the community will be posted to a "Frequently Asked Questions (FAQ)" web page accessible at the URL <http://www.darpa.mil/dso/solicitations/FY2008CSSGFAQ.htm>.

OTHER IMPORTANT INFORMATION

This solicitation, along with the 2008 CSSG PIP, constitutes a DARPA Research Announcement (RA), which is a Broad Agency Announcement (BAA) as contemplated in the FAR 6.102 (d)(2). All prospective proposers MUST also refer to the PIP in addition to the RA 07-43 solicitation before submitting a proposal. The Government reserves the right to select for award all, some, or none of the proposals in response to this announcement. Only U.S. institutions of higher learning are eligible for awards under this RA, and participants must be junior faculty members who are able to receive a U.S. Department of Defense SECRET security clearance. All responsible sources may submit a proposal that shall be considered by DARPA. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals.

RA 07-43 will remain open through August 10, 2007, no later than 4:00PM, ET, which is the due date for CS Study Panel Phase 1 proposals. Only those candidates receiving awards for CS Study Panel participation will be eligible to submit proposals for Phase 2 CS Research Projects. Only those CS Study Panel participants who receive a Phase 2 CS Research Project award will be eligible to submit proposals for Phase 3 CS Research Projects. Details regarding research proposal submissions for Phase 2 and 3 will be communicated to the selected CS Study Panel participants during Phase 1 and 2 respectively. Phase 2 and 3 CS Research Project proposals will also be evaluated in accordance with evaluation criteria listed in the PIP. It should be noted that no further RA announcement or amendment is anticipated for Phase 2 and 3 CS Research Project awards.